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ABSTRACT

This paper reports on data from a 4-year, cross-sectional study of preservice teachers who participated in a yearlong Professional Development School internship/student teaching experience. Preservice teachers worked in classrooms with mentor teachers for two 8-week placements during the fall semester and returned to student teach with the same teachers during the spring semester. During the fall internship, students observed, planned, and taught with their mentors on Tuesday and Thursday mornings. Thursday afternoons were devoted to on-site classes designed to support standards-based planning and to reflect on their teaching experiences and professional growth. The evaluation of this project included assessment of preservice participants at the beginning, at mid-year, and at the end of their experience to determine changes in their self-efficacy as teachers and their Stages of Concern as measured by the C-BAM. Journal responses to prompts regarding their concerns, their role as teachers, and reflections on their teaching are reported and compared to changes in self-efficacy and Stages of Concern. Finally, the potential impact of this model of preservice education is discussed. (SM)

A Four-Year Cross-Sectional Study of Changes in Self-Efficacy and Stages of Concern Among Pre-service Teachers

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A Four-Year Cross-Sectional Study of Changes in Self-Efficacy and Stages of Concern Among Pre-service Teachers

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Abstract: This paper will report on data from a four-year cross-sectional study of pre-service teachers who participated in a yearlong PDS Internship/Student Teaching experience. Pre-service teachers worked in classrooms with mentor teachers for two eight-week placements during the fall semester and returned to student teach with the same teachers during spring semester. During the fall internship students observed, planned and taught with their mentors on Tuesday and Thursday mornings. Thursday afternoons were devoted to on-site classes designed to support standards-based planning and to reflect on their teaching experiences and professional growth. The evaluation of this project included the assessment of pre-service participants at the beginning, at mid-year and at the end of their experience to determine changes in participants' self-efficacy as teachers and their Stages of Concern as measured by the C-BAM. In addition, journal responses to prompts regarding their concerns, their role as a teacher and reflections on their teaching will also be reported and compared to changes in self-efficacy and Stages of Concern. Finally, the potential impact of this model of pre-service education will be discussed.

Objectives: The objectives of this presentation are:

- 1.) To describe the innovations of this program and why we believe they positively impact teacher training.
- 2.) To describe the shift in self-efficacy from the beginning to the end of the program.
- 3.) To describe the relationship between self-efficacy and Stages of Concern on pre and post test measures.
- 4.) Examine the implications of this study for pre-service education.

Background of the School/University Collaboration: It is the purpose of this paper to reflect on the development of a partnership between the University of Akron and several neighboring school districts. Currently in its fifth year, the collaborative was initially funded in excess of one quarter of a million dollars by a Goals 2000 grant to redesign pre-service teacher education, practicing teacher roles and student learning experiences within a Professional Development School framework. The primary interest was to foster relationships between schools that would welcome and mentor senior level elementary education students during an internship semester and through student teaching, thus providing a year of site-based experiences grounded in "best practice" classrooms and teaching. On-site classes focusing on reflective practice (Zeichner, 1980) were designed to clearly link theory and practice, to help student participants interpret their site-based experiences.

Funded for four years, the program went through several transformations as grant requirements dictated. Training for mentor teachers through out the county, on-going support for entry year teachers and assessment training for the state adopted Praxis III evaluation for entry year teachers were some of the requirements set forth by a Goals 2000 grant. Although the program has evolved over the years reflecting insights and adjustments, the basic design of the PDS/Internship/Student Teaching program has remained intact.

Now in its fifth year, the teaching program is not grant funded. With University support as well as funds left from the previous year, we have been able to provide students with books and materials to augment their learning and teaching. In addition to consumable supplies, student participants have access to laptop computers, digital cameras, teacher resource books and other resources that have accumulated.

Along with changes in funding, changes in the environment have also taken place this year. Two of the PDS schools offer unique opportunities for our students; one school is a performing arts magnet school, while the other is a full inclusion school. Students spend two days each week in the classroom prior to student teaching.

Methods: the project described herein represents one component of the evaluation process in which the growth of the cohort intern/student teachers is assessed as they become teaching professionals.

Subjects include 53 pre-service elementary education students from a Midwest urban university who participated in a year-long site based field experience. 10-15 students each year interned with two mentor teachers during the fall semester (eight weeks in each placement) and then student taught with those same teachers during the spring semester.

Instruments used for this aspect of the research include a self-efficacy scale designed to assess changes in teachers' perceptions of their ability to have an effect. Literature in self-efficacy indicates that this is a significant predictor of teacher and student performance.

One of the major instruments for measuring change over time is the C-BAM, Stages of Concern Questionnaire. The C-BAM allows one to analyze the concerns individuals have at different stages of an innovation. The assumption that it is based upon is that the early stage of any innovation, participant concerns are very different than they are when they become more comfortable with the innovation, and therefore one can estimate the level of change by analyzing the participants' concerns.

Hord et al (1987) identified six levels or stages of concern. Arranged Hierarchically from lowest to highest these are:

- **Awareness-** in which one is not really concerned about the new innovations;
- **Informational-** are general concerns about the innovations and the requirements;
- **Personal-** measures concerns about the individual's role and the anticipated demands of the new innovations;
- **Management-** deals with the concerns about the organization, time requirements, and what is needed to make the innovation run smoothly;
- **Consequences-** deals with the concerns about student outcomes;
- **Refocusing-** the highest level of concern, deals with putting effort into finding more effective ways to implement the innovation.

For the purposes of this study the self-efficacy scale and the C-BAM were administered to participants at three points in time- when they entered the program, at the end of the internship experience and at the end of student teaching. It is expected that at the beginning of the program participants will exhibit lower levels of self-efficacy concern, and as they successfully progress through the program they will become more efficacious and their concerns will move to higher levels.

Design and Analysis: The research design is a mixed method, using both qualitative and quantitative data (Newman & Benz, 1998). In Campbell and Stanley (1963) terms, it can be represented as a pre-test- treatment-posttest-posttest (OxOO) longitudinal design.

Descriptive, inferential and qualitative analyses were run. The descriptive and inferential analyses were based on participants' responses to the Self-Efficacy Questionnaire and the C-BAM Stages of Concern scale, the Intern Questionnaire and the Student Teaching Questionnaire developed for this project. Qualitative analyses were based on the multiple responses in intern/student teacher journals,

formal and informal observations, and dialogues during cohort meetings throughout the year. These analysis focused on responses that could be identified as indicators of changes in Stages of Concern, as well as the response to the repeated prompt, "What is the role of the teacher?"

Expected Findings: The researchers fully expected that the interns participating in the fourth year of this program would exhibit the same shifts in self-efficacy and stages of concern that were evident in the prior internship groups

Findings: Qualitative evidence was in the form of written journal responses along with comments and concerns expressed during our weekly meetings throughout the internship as well as during our bi-weekly student teaching colloquium. These data indicated the same patterns of going from high-efficacious entering attitudes with a focus on positively impacting student learning to a mid year questioning of their teaching skills and, for some, even their suitability for teaching. Stages of Concern exhibited at this time indicated a focus on the Informational (fulfilling basic requirements) and Personal (the role and anticipated demands on the individual). As the year wound down, these students again shifted to a higher sense of self-efficacy based on their demonstrated skill and success in student teaching. For some, the Stages of Concern represented by their responses reflected a shift from a survival orientation to Consequences (concerns about student outcomes) and two students had responses that appeared to indicate they were ready to Refocus, which is the highest level assessed by the C-BAM. These students were suggesting strategies for improving their impact on students as well as methods for collaboration to achieve better delivery of instruction.

Quantitative data for this year of the project is available but has not been fully analyzed at this point in time. A cursory look at this data seemed to support the qualitative analyses of journals and meeting notes.

Educational Implications: One of the legitimate criticisms of educational research is that it often looks at data as a snap shot in time. The data reflecting the Internship/Student Teaching program under study clearly indicates that at different points in time, the researchers could make very different conclusions about the students and the program. Throughout the course of the year students who began with a sense of high efficacy and a desire to "change life in their classroom" had a very definite shift in their attitudes and concerns as they increasingly assumed additional responsibilities which often made them feel less adequate and frustrated. As they gradually grew into their new role, one of a responsible teaching professional, they again shifted to a more realistic perception of themselves. An additional strength to this research is that we not only

measured the changes in an individual sample, but we replicated this effect over five samples, during a four-year period. (We began one group mid year, overlapping an existing group, but quickly abandoned that effort.) These procedures allow us to increase our confidence in the observed pattern of a roller-coaster effect, thus we can better prepare ourselves, our students and their mentor teachers to ride the "normal" wave without undo concern about unusual personal inadequacies.

Yet another implication that can be taken from the longitudinal observation of this program is that becoming a teacher is hard work. Too often, the public at-large as well as some in the field of education believe that after you present willing people with a few strategies and a set of text books, there isn't much else to do. Our research, as well as our commitment to helping in the development of reflective teaching professionals, clearly indicates to us that this rocky road needs support, on-going instruction in effective practice, and an opportunity to learn and grow as a community. If we do not provide mentors who can guide, encourage and be supportive, we are in danger of losing some very talented people when the "roller-coaster" is at the bottom of the ride.